

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

NOVITATES FLORAE UTAHENSIS.

IVAR TIDESTROM.

During the month of June and the early part of July, 1909, duties took me over the very interesting region—the Kaibab Plateau—lying east of Kanab, Utah. The region is part of the Buckskin Mountains, and it is essentially a yellow pine area, except in the immediate vicinity of the basin, or at 1500 m. elevation, and above 2700 m. where spruces and firs abound.

Among the yellow pine I found among other plants very interesting specimens of *Aquilegia*,* one of which was described as *A. pinetorum*. Along with this species I found also a *Delphinium* which I have not been able to refer to any of the hitherto known species and for which the following diagnosis is proposed:

***Delphinium pinetorum* sp. nov.**

Perennis (?) e radice tuberifera, 2-4 dm. altitudine, deorsum pubescens vel glabrescens, sursum pubescens: caules pauci: folia radicalia tenuiter petiolata; laminae 2 cm. plus minusve latis, ternatis, partibus fere ad basin divisis, laciniis linearibus 1 mm. plus minusve latis, apice albido-callosis: folia caulina simpliciora: flores azurei in racemo simplici; pedunculis tenuibus ascendentibus, bracteis filiformibus quam pedunculis brevioribus: calcar aliquantulum curvatus sepala superans; sepalis oblongis acutis azureis vel coeruleis; petala superiora albida, emarginata purpureo-venosa; inferiora azurea barbata bifida: carpella terna sericea, matura fere erecta 1 cm. v. longiora. Floret Junio altitudine 2400 m.

Type in the U. S. National Herbarium [Tidestrom 2375], collected at an altitude of 2400 m. on the Kaibab Plateau, northern Arizona, where it grows among *Pinus ponderosa*. Also collected on the Uncompahgre Plateau near Ridgway, Colorado [Tn. 2140], and in the La Sal Mountains, eastern Utah, by Mr. Mellenthin of the Forest Service.

Distinguished by the linear, sometimes filiform lobes of its leaves. . It

* See Amer. Midland. Natur. 1: 165, 1910.

ranges so far as known from the Uncompahgre Plateau westward into the La Sal Mountains and southward towards the San Francisco Mountains of Arizona. It has been observed at an elevation of 2100 m. upward to 3000 m.

Eriogonum Kearneyi sp. nov.

Fruticulosa, multicaulis, 3 dm. v. altior; caules tomentosi, infra mediam foliati: folia petiolata elliptica; petiolis 1 cm. longis v. brevioribus basi dilatatis; laminis ca. 2.5 cm. longis 1 cm. latis, supra sparse, subtus dense tomentosis, mucronatis, margine integra: inflorescentia (dichasium decompositum) internodiis primariis rectis circa 5 cm. longis, secundariis brevioribus; floribus paucis, parvis, involuero campanulato dentato dense tomentoso; pedicellis 1.5 mm. longis; perianthii lobis inaequalibus 1 mm. plus minusve longis obovatis inaequaliter denticulatis albidis vel roseis: ovarium lineare, stigmatibus tribus: fructus ignotus.

Type in the U. S. National Herbarium, Kearney and Shantz No. 3218, collected on the sandhills 3 miles west of Tooe, Utah, growing with *Psoralea lanceolata*.

This is one of the many interesting species collected by Messrs. Kearney and Shantz. It is readily recognized by its white tomentum, by its inflorescence [a decomposed dichasium], which latter forms fully the upper half of the plant. The lower branches of the inflorescence are straight, forming with one another an angle of about 45° more or less.

Oreocarya Shantzii sp. nov.

Perennis, spithamea, caespitosa, multicaulis: caules strigosi, pubescentia pilis albis intermixta, infra mediam foliosi, supra thyrsiflora: folia spatulato-linearia 2 cm. longa, infra apicem 4 mm. lata, infra mediam linearia, dense strigosa: calyx dense hirsutus, lobis linearibus 4 mm. longis: corolla alba, tubo calycem paulo superante, limbo rotato, lobis rotundatis; nuculae elongato-ovatae, obtusae; dorso albido-punctatae.

Type in the U. S. National Herbarium, Kearney and Shantz No. 3098, collected in dry, saline soil at Grant's Station south of the Great Salt Lake, Utah, growing with *Atriplex confertifolia*.

Mertensia Sampsonii sp. nov.

Planta robusta glabra: folia radicalia vel infra caulis mediam oblanceolata 1 dm. longa vel breviora, punctata; alia ampliora sessilia, elliptico-lanceolata: inflorescentia paniculata; pedicellis lepidotis: calyx fere 5-divisus; lobis lineari-lanceolatis ciliatis 4 mm. longis: corolla coerulea 12 mm. longa, tubo cylindrico calycem paulo superante: intus basi villosa; limbo campanulato, rotundo-lobato tubum aequante: filamenta dilatata antheras aequantia: stylus inclusus 8-10 mm. longus, stigmatibus peltato: fructus ignotus.

Type in the U. S. National Herbarium, Sampson No. 677, collected in the Wasatch Mountains, east of Ephraim, Utah, at an altitude of 2850 m.